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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,596	12/22/2005	Holger Lorenz	ETF-0038	8604
23413	7590	05/21/2008	EXAMINER	
CANTOR COLBURN, LLP			HUNNINGS, TRAVIS R	
20 Church Street				
22nd Floor				
Hartford, CT 06103				
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/562,596	Applicant(s) LORENZ ET AL.	
	Examiner TRAVIS R. HUNNINGS	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20080108</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-6, 9, 10, 13-18, 21 and 22 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Meister et al. (Meister; US Patent 5,570,903) for the record.

Regarding claim 1, Meister discloses *Occupant And Infant Seat Detection In A Vehicle Supplemental Restraint System* that has the following claimed limitations:

The claimed occupancy sensor with at least two pressure actuatable switching elements associated to a surface of a seat with a certain distance between them in such a way that a first switching element is associated to a first area of the seat and a second switch element is associated to a second area of the seat is met by the sensors being deployed in a vehicle seat as shown in figures 5 and 6;

Meister does not specifically disclose the claimed first and second switching elements are connected together in such a way as to implement a logical AND gate operation. Meister does disclose an analyzer circuit that is set up to determine the presence of a sitting person based on any user desired combination of inputs from the sensors (column 5, lines 6-32). It would have been obvious to one of ordinary skill in the art to use a logical AND gate operation between two sets of sensors in order to provide a more conclusive indication of someone sitting. Therefore it would have been obvious

to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Meister to utilize a logical AND gate operation.

Regarding claim 2, Meister does not specifically disclose the claimed first and second switching elements are connected together in series. Meister does disclose an analyzer circuit that is set up to determine the presence of a sitting person based on any user desired combination of inputs from the sensors. It would have been obvious to one of ordinary skill in the art to connect two sets of sensors in series in order to provide a more conclusive indication of someone sitting. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Meister to connect the two sets of sensors in series.

Regarding claim 3, the claimed first and/or second switching elements comprising a pressure sensor is met by the sensors being tripped because of the pressure that is applied to them when a person sits down on the seat (column 5, lines 6-32).

Regarding claim 4, Meister does not specifically disclose the claimed first and/or second switching elements comprises a plurality of individual switching cells connected together in such a way as to implement a logical OR gate operation. Meister does disclose an analyzer circuit that is set up to determine the presence of a sitting person based on any user desired combination of inputs from the sensors (column 5, lines 6-

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32). It would have been obvious to one of ordinary skill in the art to use a logical OR gate operation between two sets of sensors in order to provide a more conclusive indication of someone sitting. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Meister to utilize a logical OR gate operation.

Regarding claim 5, Meister does not specifically disclose the claimed individual switching cells of a switch element being connected in parallel. Meister does disclose an analyzer circuit that is set up to determine the presence of a sitting person based on any user desired combination of inputs from the sensors (column 5, lines 6-32). It would have been obvious to one of ordinary skill in the art to connect the sensors in parallel in order to provide a more conclusive indication of someone sitting. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Meister to connect the sensors in parallel.

Regarding claim 6, the claim is interpreted and rejected as claim 3 stated above.

Regarding claim 9, the claimed first and second switching elements are arranged at least approximately at equal distances from a set centerline running longitudinally with respect to the vehicle and at a certain distance from each other is met by the sensors being arranged as can be seen in figure 6.

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Regarding claim 10, the claim is interpreted and rejected as claim 9 stated above.

Regarding claim 13, the claim is interpreted and rejected as claim 1 stated above.

Regarding claim 14, the claim is interpreted and rejected as claim 2 stated above.

Regarding claim 15, the claim is interpreted and rejected as claim 3 stated above.

Regarding claim 16, the claim is interpreted and rejected as claim 4 stated above.

Regarding claim 17, the claim is interpreted and rejected as claim 5 stated above.

Regarding claim 18, the claim is interpreted and rejected as claim 3 stated above.

Regarding claim 21, the claim is interpreted and rejected as claim 9 stated above.

Regarding claim 22, the claim is interpreted and rejected as claim 9 stated above.

3. Claims 7, 11, 19 and 23 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Meister in view of Federspiel (US Patent 7,161,460) for the record.

Regarding claim 7, Meister does not specifically disclose the claimed sensor is a foil-type pressure sensor of a through-mode type. Federspiel discloses *Switching Element Provided With A Foil Construction* that teaches using a foil-type through mode pressure sensor (column 3, lines 39-51). Replacing the sensor of Meister with a known pressure sensor as taught by Federspiel would give the user a wider range of options to utilize the device. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Meister according to the teachings of Federspiel to use a foil-type through-mode pressure sensor.

Regarding claims 11, 19 and 23, the claims are interpreted and rejected as claim 7 stated above.

4. Claims 8, 12, 20 and 24 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Meister in view of Bieck et al. (Bieck; US Patent Application Publication 2004/0163939) for the record.

Regarding claim 8, Meister does not specifically disclose the claimed sensor is a foil-type pressure sensor of a shunt-mode type. Bieck discloses *Foil-Type Switching Element With Improved Spacer Design* that teaches using a foil-type shunt mode pressure sensor (paragraph 23). Replacing the sensor of Meister with a known pressure sensor as taught by Bieck would give the user a wider range of options to utilize the device. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Meister according to the teachings of Bieck to use a foil-type shunt-mode pressure sensor.

Regarding claims 12, 20 and 24, the claims are interpreted and rejected as claim 7 stated above.

Response to Arguments

5. Applicant's arguments filed 11 March 2008 have been fully considered but they are not persuasive. Applicant argues the following:

Argument A: Meister does not teach a first switching element and second switching element that are *connected* together in such a way as to implement a logical AND operation.

Responses:

Regarding argument A, as noted in the rejection above, Meister does not specifically disclose the claimed first and second switching elements are connected together in such a way as to implement a logical AND gate operation. Meister does disclose an analyzer circuit that is set up to determine the presence of a sitting person based on any user desired combination of inputs from the sensors (column 5, lines 6-32). It would have been obvious to one of ordinary skill in the art to use a logical AND gate operation between two sets of sensors in order to provide a more conclusive indication of someone sitting based on the inputs from more than one pressure sensor. While the analyzer circuit does not specifically hard-wire each connection together to perform this operation, they would be considered by one of ordinary skill in the art to be connected to one another.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TRAVIS R. HUNNINGS whose telephone number is (571)272-3118. The examiner can normally be reached on 8:00 am - 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George A. Bugg can be reached on (571) 272-2998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TRH

/George A Bugg/
Acting SPE of Art Unit 2612